

SECTION 15150

SANITARY WASTE AND VENT PIPING

EDIT TO SUIT PROJECT.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Pipe and pipe fittings, floor drains, cleanouts, and manholes.

1.2 LANL PERFORMED WORK

- A. LANL's support services subcontractor (SSS) will tie into existing systems which include [sanitary sewer lines, septic tanks, treatment plants, lift stations, and manholes.]
- B. LANL's support services subcontractor will test alarms and controls on wastewater lift stations.
- C. LANL's support services subcontractor will inspect interior of sanitary sewer lines beyond the building wall with video camera for piping integrity and proper construction.

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01300:
 - 1. Catalog data on pipe materials, fittings and accessories.
 - 2. Installation instructions for accessories.

PART 2 PRODUCTS

2.1 PRODUCT SUBSTITUTION

- A. Refer to Section 01630.

2.2 SANITARY SEWER PIPING, BURIED BEYOND 5 FEET OF BUILDING

- A. Cast Iron Pipe and Fittings: ASTM A74, service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.
- B. PVC Pipe and fittings: ASTM D3034, SDR 35.
 - 1. Joints: Bell and spigot, ASTM D3212 rubber gaskets.

SPECIFY THE FOLLOWING (2.2 C AND D) FOR NON GRAVITY SYSTEMS (FORCE MAIN)

- C. PVC Pipe and Fittings: ASTM D3034, SDR 35.
 - 1. Joints: Bell and spigot, ASTM D3212 rubber gaskets.

- D. Ductile Iron Pipe: AWWA C151, Class 150.
 - 1. Fittings: AWWA C110, ductile iron.
 - 2. Joints: Bell and spigot, AWWA C111 rubber gaskets.
- 2.3 SANITARY WASTE PIPING, BURIED WITHIN 5 FEET OF BUILDING
 - A. Cast Iron Pipe and Fittings: ASTM A74 service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.
- 2.4 SANITARY WASTE AND VENT PIPING, ABOVE GRADE INSIDE BUILDING
 - A. Cast iron pipe and fittings: CISPI 301 hubless, service weight.
 - 1. Joints: C1SP1310, neoprene gaskets and stainless steel clamp/shield assemblies.
 - B. Cast iron pipe and fittings: ASTM A74 service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.
- 2.5 FLOOR DRAINS
 - A. Manufacturer: J.R. Smith Mfg. Co.
 - B. [Select floor drains with sufficient size and free area to pass anticipated flow. Refer to manufacturer's catalog data for selection criteria.]
- 2.6 FLOOR SINKS
 - A. Manufacturer: J.R. Smith Mfg. Co.
 - B. [Specify floor sinks when the discharge of indirect waste pipes discharge into the sanitary waste system. Refer to manufacturer's catalog data for selection criteria.]
- 2.7 CLEANOUTS
 - A. Manufacturer: J.R. Smith Mfg. Co.
 - B. [Select cleanouts to suit project. Refer to manufacturer's catalog data for selection criteria.]
- 2.8 MANHOLES
 - A. Provide precast concrete manhole per details shown on the Drawings.

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Verify excavations are to required grade. Do not over excavate.
- 3.2 PREPARATION
 - A. Ream pipe ends and remove burrs.

3.3 TIE-INS

- A. Tie-ins to existing piping, manholes, and equipment shall be coordinated with and performed by LANL's support services subcontractor. Contractor shall provide materials for tie-in and perform necessary excavation and work to prepare area.

3.4 SEWER LINE COVER

- A. Provide cover, bedding, warning tape and tracer wire per trench details. Refer to Section 0225, Trenching.

3.5 INSTALLATION

- A. Comply with Uniform Plumbing Code, latest edition.
- B. Extend cleanouts to finished floor or wall surface. Lubricate threaded cleanout plugs with non-hardening thread lubricant. Ensure clearance at cleanout for snaking drainage system.
- C. Encase exterior cleanouts in concrete, flush with grade.
- D. Install floor cleanouts at elevation to accommodate finished floor.
- E. Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
- F. Install piping penetrating roofed areas to maintain integrity of roof assembly.
- G. Install bell and spigot pipe with bell end upstream.
- H. Sleeve and caulk pipes passing through partitions, walls and floors. Refer to Section [15060].
- I. Test piping system with water in accordance with Section 15992.
- J. Label piping in accordance with Section 15190.
- K. Support piping in accordance with Section [15060].

3.6 LANL ACCEPTANCE INSPECTION AND TESTING

- A. LANL Construction Inspector will contact FE-8 to arrange for video inspection of interior of piping system beyond building wall. LANL's support services subcontractor will perform inspection.
- B. LANL Construction Inspector will contact FE-8 to arrange for inspection and testing of alarms and controls on wastewater lift stations. LANL's support services subcontractor will perform work.

END OF SECTION